AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A drive unit including

an electric motor (1),

a drive unit casing (2) accommodating therein the electric motor,

an inverter (3) that controls the electric motor, and

a flow passage (4) of a refrigerant that cools the inverter, the drive unit characterized in that the inverter is mounted on the drive unit casing such that a heat sink (53) united with a substrate of the inverter defines a space (R) on a portion thereof opposed to the drive unit casing,

the space is communicated to the flow passage of the refrigerant,

the heat sink comprises heat-sink side fins (56) extending into the space toward the drive unit casing, and

the heat-sink side fins and the drive unit casing contact with each other in a state of low thermal conduction, wherein the low thermal conduction is the line contact for the heat-sink side fins and drive unit casing.

2. (currently amended): A drive unit including

an electric motor,

a drive unit casing accommodating therein the electric motor,

an inverter that controls the electric motor, and

a flow passage of a refrigerant that cools the inverter, the drive unit characterized in that the inverter is mounted on the drive unit casing such that a heat sink united with a substrate of the inverter defines a space on a portion thereof opposed to the drive unit casing,

the space is communicated to the flow passage of the refrigerant,

the heat sink comprises heat-sink side fins extending into the space toward the drive unit casing,

separation means (6) for preventing thermal conduction is provided in the space, wherein the separation means comprises a low thermal conductive member (61), and

both the heat-sink side fins and the drive unit casing contact directly with the separation means.

3. (cancelled)

4. (currently amended): ~~The drive unit according to claim 2,~~ A drive unit including

an electric motor,

a drive unit casing accommodating therein the electric motor,

an inverter that controls the electric motor, and

a flow passage of a refrigerant that cools the inverter, the drive unit characterized in that the inverter is mounted on the drive unit casing such that a heat sink united with a substrate of the inverter defines a space on a portion thereof opposed to the drive unit casing,

the space is communicated to the flow passage of the refrigerant,

the heat sink comprises heat-sink side fins extending into the space toward the drive unit casing,

separation means (6) for preventing thermal conduction is provided in the space, wherein the separation means comprises a plurality of separation members (60) with a space (R3) therebetween, and

both the heat-sink side fins and the drive unit casing contact directly with the separation means.

5. (original): The drive unit according to claim 2, wherein the separation means comprises a laminated member formed by laminating a low thermal conductive member on a separation member.

6. (currently amended): The drive unit according to ~~claim 1~~ claim 2, wherein the drive unit casing comprises drive-unit-casing side fins (22) extending into the space toward the heat sink.

7. (original): The drive unit according to claim 6, wherein the space is compartmented by the separation means into a first chamber (R1) facing toward the heat sink and a second chamber (R2) facing toward the drive unit casing.

8. (currently amended): The drive unit according to ~~claim 1~~ claim 2, wherein the inverter is received in an inverter casing (5) composed of a member separate from the inverter with a substrate thereof fixed to a bottom wall of the inverter casing and constitutes a heat sink, of which a substrate is united with the bottom wall of the inverter casing.

9. (currently amended): The drive unit according to ~~claim 1~~ claim 2, wherein the inverter together with the heat sink (33) that is united with a substrate thereof are received in an inverter casing composed of a member separate from the inverter.

10. (original): The drive unit according to claim 7, wherein the heat-sink side fins and the drive-unit-casing side fins cooperatively generate a common refrigerant flow pattern within the space.

11. (currently amended): The drive unit according to ~~claim 3~~ claim 6, wherein the low thermal conductive member is shaped to follow contact portions of the heat-sink side fins and the drive-unit-casing side fins.